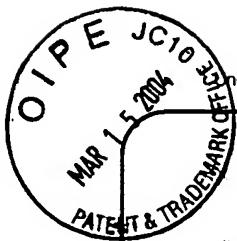


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission 39

Application Number	10/727,939
Filing Date	December 03, 2003
First Named Inventor	Wen-Bin YAN
Art Unit	
Examiner Name	
Attorney Docket No.	TGR-106US

**ENCLOSURES (Check all that apply)**

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/Declaration(s)<br><br><input type="checkbox"/> Extension of Time Request<br><br><input type="checkbox"/> Express Abandonment Request<br><br><input checked="" type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><br><input type="checkbox"/> Response to Missing Parts/<br>Incomplete Application<br><br><input type="checkbox"/> Response to Missing Parts under<br>37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a<br>Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation,<br>Change of Correspondence<br>Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication<br>to Group<br><input type="checkbox"/> Appeal Communication to Board<br>of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group<br>(Appeal Notice, Brief, Reply<br>Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please<br>identify below:<br><br>Return Postcard<br>6 References |
|---|--|--|

**Remarks:**

<b>SIGNATURE OF APPLICANT, ATTORNEY OR AGENT</b>			
Firm or Individual Name  Signature	Jacques L. Etkowicz	Registration No. (Attorney/Agent)	41,738
Date	March 12, 2004		

**CERTIFICATE OF TRANSMISSION / MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date:

Typed or printed name	Kathleen Carney		
Signature	Kathleen Carney	Date	March 12, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, ALEXANDRIA, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appln. No: 10/727,939  
Applicant: Wen-Bin Yan  
Filed: December 3, 2003  
Title: APPARATUS AND METHOD FOR IMPROVED ANALYSIS OF LIQUIDS BY  
CONTINUOUS WAVE-CAVITY RING DOWN SPECTROSCOPY  
TC/A.U.:  
Examiner:

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 (R&P) submitted herewith. A copy of each of the listed non-patent references is also enclosed.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

This Information Disclosure Statement is being filed before mailing of the first Official Action. No first Official Action has yet been received and it is presumed that none has yet been mailed. No fee or statement is required. 37C.F.R. § 1.97(b).

Respectfully submitted,

RatnerPrestia



Jacques L. Etkowicz, Reg. No. 41,738  
Attorney for Applicant

JLE/kc

Enclosures: PTO Form 1449  
(6) References  
Transmittal

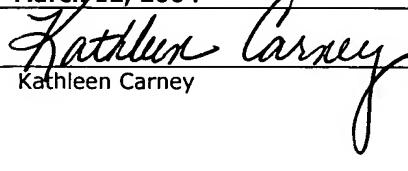
Dated: March 12, 2004

P.O. Box 980  
Valley Forge, PA 19482  
(610) 407-0700

The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. **18-0350** of any fees associated with this communication..

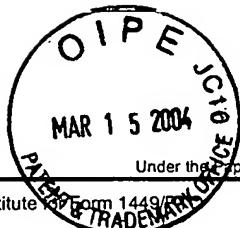
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on

March 12, 2004



Kathleen Carney

K:\I:\TGR\106US\IDS\_01.DOC



~~Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.~~

Approved for use through 04/30/2004. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
a collection of information unless it displays a valid OMB control number.

Substitute 1099 Form 1449/Rev.

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

**(Use as many sheets as necessary)**

SHEET 1 of 2

**Complete if Known**

Application Number	10/727,939
Filing Date	December 03, 2003
First Named Inventor	Wen-Bin Yan
Art Unit	
Examiner Name	
Attorney Docket No.	TGR-106US

## **U.S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

**1** Applicant's unique citation designation number (optional).

<sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

\*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

**5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible**

**6**Applicant is to place a check mark here if English language translation is attached.

Applicant is to place a check mark here if English language translation is attached.  
The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO:**  
**Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449B/PTO

**Complete if Known****INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

SHEET 2 of 2

Application Number

10/727,939

Filing Date

December 3, 2003

First Named Inventor

Wen-Bin Yan

Art Unit

Examiner Name

Attorney Docket No.

TGR-106US

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		RICHARD ENGELN and GIEL BERDEN, "Cavity Ring Down Absorption Spectroscopy", May 22, 2001, pages 1-9	<input type="checkbox"/>
		RICHARD ENGELN and GERARD MEIJER, "A Fourier Transform Cavity Ring Down Spectrometer", Rev. Sci. Instrum. 67,2708 (1996), Dept. of Molecular and Laser Physics, University of Nijmegen, pages 1-7	<input type="checkbox"/>
		A.J. HALLOCK, E.S.F. BERMAN, and R.N. ZARE, "Use of Broadband, Continuous-Wave Diode Lasers in Cavity Ring-Down Spectroscopy for Liquid Samples", January 10, 2003, Applied Spectroscopy, Vol. 57, No. 5. 2003, pages 571-573	<input type="checkbox"/>
		ALEXANDER J. HALLOCK, ELENA S.F. BERMAN, AND RICHARD N. ZARE, "Ultratrace Kinetic Measurements of the Reduction of Methylene Blue", August 13, 2002, J. AM. CHEM. SOC. Vol. 125, No. 5. 2003, pages 1158-1159	<input type="checkbox"/>
		K. J. SCHULZ and W. R. SIMPSON, "Frequency-Matched Cavity Ring-Down Spectroscopy", Chem. Phys. Lett. October 14, 1998, Geophysical Institute and Chemistry Department, University of Alaska Fairbanks, pages 1-9, Figure 1	<input type="checkbox"/>
		"Use of Broadband Light Source for CRDS", Office of Technology Licensing, Stamford University, Stamford Reference S02-221, 3 pages	<input type="checkbox"/>
			<input type="checkbox"/>
Examiner Signature		Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional).<sup>2</sup>Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.